

WHAT IS CLAIMED IS:

1. A head protection air bag device having an air bag which is stored, while being folded, along the upper fringe of an opening on the cabin-inside or indoor side of a vehicle,  
5 when receiving inflation gas, said air bag developing and inflating to cover the opening,

wherein said air bag includes a gas-inflow section which inflates so as to separate a cabin-inside side wall and a cabin-outside side wall one from the other, and a non gas-inflow  
10 section which rejects inflation gas,

said gas-inflow section includes a plurality of inflatable protective shielding parts being disposed such that said inflatable protective shielding parts are longitudinally spaced from one another and cover said opening, and inflation  
15 communicating parts,

each said inflatable protective shielding part includes a plurality of inflating parts which are arranged in the longitudinal direction and vertically expandable so as to generate a tension in the longitudinal direction,

20 said non gas-inflow section includes a periphery part surrounding said non gas-inflow section,

a plate-like portion disposed between said inflatable protective shielding parts, and partitioning parts being vertically disposed and defining said inflation parts in said  
25 inflatable protective shielding parts,

said inflation communicating parts are disposed in the lower fringe side of said air bag under said plate-like portion and along the lower fringe of said air bag,

5 said inflatable protective shielding parts, which are adjacently located with said plate-like portion being interposed therebetween, are communicated with each other by said inflation communicating part, and

the lower ends of said inflation parts are closed at the lower-edge side parts of the periphery parts.

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2. A head protection air bag device according to claim 1, wherein one of the ends of said air bag is coupled to a body of the vehicle by coupling parts extending away from said gas-inflow section and said coupling parts are coupled to the lower-edge side part of the periphery parts at the completion of the developing and inflating operation.

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3. A head protection air bag device according to claim 1, wherein said inflatable protective shielding parts, which are adjacently located with said plate-like portion being interposed therebetween, include inflow ports allowing said inflation gas to flow thereinto which are located above said plate-like portion.

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25 4. A head protection air bag device having an air bag

which is stored, while being folded, along the upper fringe of an opening on the cabin-inside or indoor side and on the side of seat recliners, and when receiving inflation gas, said air bag develops and inflates to cover the opening,

5            wherein said air bag includes a gas-inflow section through which said inflation gas is introduced into said air bag, and a periphery part surrounding said gas-inflow section,

10            said gas-inflow section is partitioned, by partitioning/coupling parts coupling the cabin-inside side wall with the cabin-outside side wall, into a plurality of inflation parts, which are arranged side by side in the longitudinal direction, and inflate when receiving said inflation gas so as to separate said cabin-inside side wall and the cabin-outside side wall one from the other, and

15            said inflation parts located on the side of said seat recliners serve as lower-end displacement inflation parts located such that the lower ends thereof are higher than the lower ends of said other inflation parts, thereby preventing it from interfering with the upper ends of said seat recliners.

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5.        Ahead protection air bag device according to claim 4, wherein parts of the periphery part, which are located under said lower-end displacement inflation parts of said air bag, are substantially level with parts of the periphery parts under  
25        the inflation parts, which are adjacent to said lower-end

displacement inflation parts, in the lower edge height, when said air bag is developed to be flat in a non inflating state.

6. A head protection air bag device according to claim 5 4, wherein said gas-inflow section includes a front-seat inflow section and a rear-seat inflow section, which are respectively provided covering openings on the side of the front seat and rear seat,

10 said front-seat inflow section and said rear-seat inflow section include, respectively, lower-end displacement inflation parts corresponding to said front seat and said rear seat, and

15 a width dimension of said lower-end displacement inflation part of said front-seat inflow section as longitudinally viewed is larger than that of said lower-end displacement inflation part of said rear-inflow section as longitudinally viewed.

7. A head protection air bag device according to claim 20 4, wherein said air bag introduces said inflation gas thereinto both at the time of side collision and at the time of the roll-over.